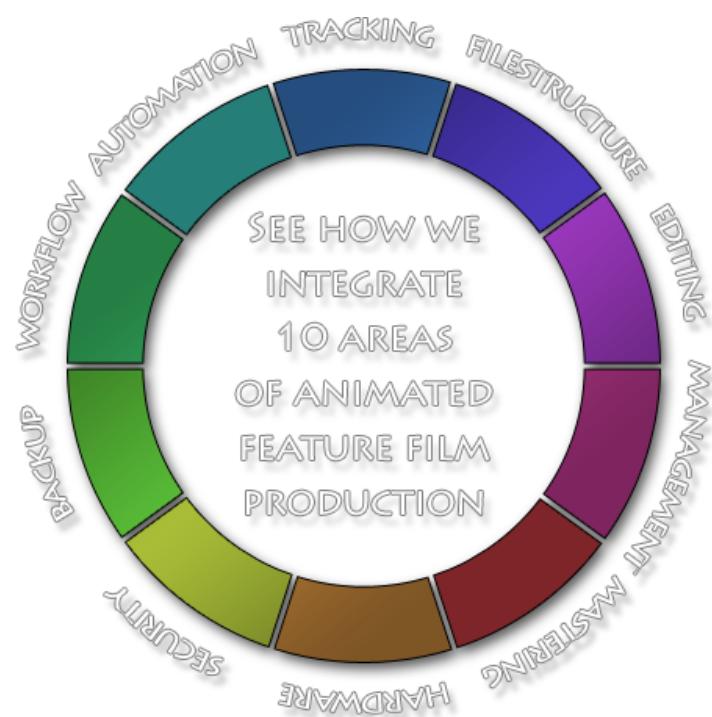


HOBSOFT



SERVICES
SYSTEM
METHODS

HOBSOFT SERVICES

Explanation of the 10 areas covered by HoBSoft

HoBSoft provides several services, which we find are inseparable. Based on the experience from several productions, we know that all these responsibilities are linked strongly together and should be planned in one unit.

This is why we are showing the 10 areas covered by HoBSoft as a complete circle.

OVERVIEW

If you hire us to be part of your animated feature film production we will take a lot of responsibilities on our shoulders.

Consider HoBSoft as another vital and hard working department in your organization who supports,



and tie together, the other departments and make them work more smoothly together.

Each page starts with an overview and continues with a more in depth explanation.

AVAILABLE INFO

On the following pages you can find information about each of the 10 areas.

MORE INFO

For more information you can always **contact** us by phone or email.

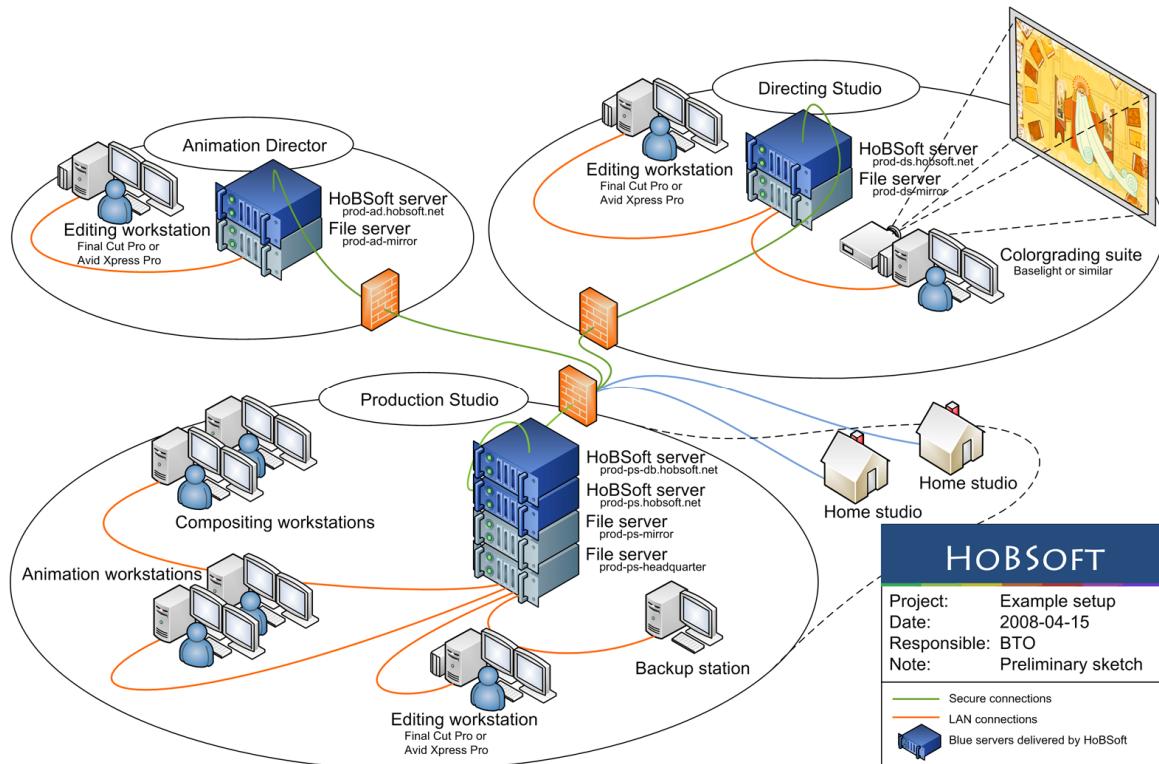


Diagram showing how the collaborating studios are connected. This must be considered a quite simple example since most productions are produced within more sites or and have more complex work split.

FILE STRUCTURE

Make naming conventions work with HoBSoft's quality control

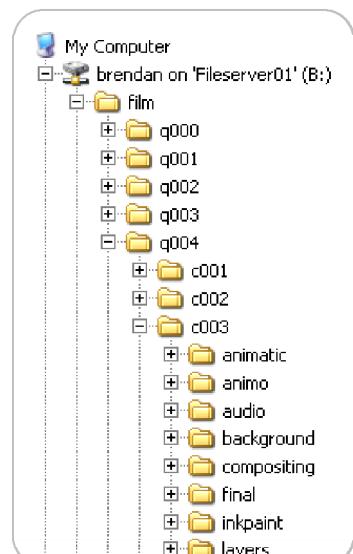
HoBSoft makes naming conventions work on files and folders by the use of quality control.

The reliable file naming is important for all the work HoBSoft does automatically such as import, export, transfer, render, convert etc.

The well organized file structure further gives you benefits such as lower disk usage, optimized backup routines, unified working procedures in all studios and much more.

OVERVIEW

It is common that the file server in the main studio of an animation production holds several million files in about one hundred thousand folders.



Example of a HoBSoft file structure

Every animation production starts out with high ambitions regarding file naming conventions, which is driven by those who have tried to organize a feature film project in the past, but experience shows that it is impossible to achieve a hundred percent accurate file naming without quality control.

We are proud to say that HoBSoft has accomplished this mission due to a number of techniques:

1. Good naming conventions
2. Available information
3. Placeholder files
4. Quality control

HoBSoft maintains a quality controlled version of the entire file structure.

RESOURCES

The system is made for collaborative work on computer files.

In scenarios where everybody is working with files on the same file server you have some resource handling built in to the operating systems.

Unfortunately it is not realistic to work remotely on the large amount of data used in animation and you will therefore inevitably be working on local versions of the files.

If you use a traditional workflow around an FTP server, you will probably keep track of ownerships by sending an enormous amount of emails. Therefore many studios hire assistants to send and receive data to the collaborating studios.

We have developed a system with resources that are automatically checked out to

those who need them, when they need them. When the resources are not needed anymore they are checked back in to the head quarter. This is all handled by the automatic task manager.

For example an automatic task named "Prepare for Rough Animation" will update the animation setup, in the animation studio with the latest approved version from the head quarter, before the animator is instructed to start the job.



Analog animation repository. The digital repository was residing on the HoBSoft head quarter.

Where other resource handlers are keeping track of every single file HoBSoft is working on folders. We find it much more practical for animation where it is common for one task to produce hundreds or even thousands of files.

GOOD NAMING CONVENTIONS

The purpose of good naming conventions is to make the users adapt and respect them. For this purpose the naming conventions must be practical and not preventing the artists from doing what they want to do.

We use our extensive experience from many animated feature film projects and from having worked with many different studios all over the world to make good naming conventions.

AVAILABLE INFORMATION

It is obviously necessary for everybody who works on the production to know what you expect from them.

We provide this information by making the working procedures available in the system as task notes.

This way any artist who is about to save a line test or start a render can read about the naming conventions and file formats etc. no matter how many time zones he is away from you..

The HoBSoft system is prepared for an unlimited amount of languages which means that working procedures can be presented

to the user in his local language.

PLACEHOLDER FILES

We have found that humans find it a lot easier to overwrite existing files with correct names instead of remembering how to name new files.

This is one of the reasons why we make extensive use of placeholder files.

This is how it works: If the system is instructed to provide a resource which has never been made – it will make it.

We have programmed a whole set of resource creators. A simple background resource could be a folder with an empty Photoshop document named correctly.

A more complex example would be a compositing setup created from a template with correct paths for input layers and render output, duration, name in render queue and color efx etc. already in place.

QUALITY CONTROL

A resource will be quality controlled every time it is attempted to be delivered.

The quality control is made very flexible and can be programmed to check for many different things.



The most common things to check for are file naming and numbering and that the number of frames or audio samples matches the scene duration in the HoBSoft production database. We also check every image for its resolution.

MANAGEMENT

Pinpoint bottlenecks with HoBSoft's planning and simulation tools

Use HoBSoft's planning tools to plan the work-splits and quotas of your production.

Use HoBSoft's simulation tools to point out bottlenecks in your plan as well as over capacity.

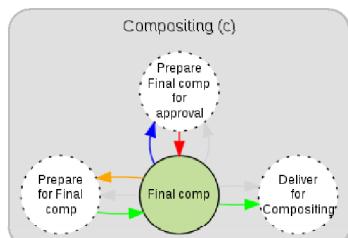
Use HoBSoft's automatic tracking to monitor the production and compare to your execution plan.

OVERVIEW

Our system supports you, as a production manager, with various useful tools and information.

Your first step will be to enter the amount of work of every task type every company is expected to produce per day.

When the movie has been broken down into sequences, scenes, characters etc you can assign [Workflows](#).



Typical workflow diagram as drawn by the HoBSoft system.

The workflows serve as a detailed computer model of the production, allowing for simulation and testing of the execution plan.

Use the simulation results to refine your plan and test it again.

Once you are in production, the system will automatically track your progress.

The progress is graphed alongside any committed planning so you can see if everything is going according to plan.

PLANNING

First you enter expected start and end dates for the main task types. The system will immediately reward you by showing your choices in a calendar and a gant chart.

As a production manager you must also inform the system about the amount of work you are expecting from each one of the studios. We call these amounts for capacities.

HoBSoft uses a concept with two types of capacities called "Experimental Capacities" and "Committed Capacities".



Production meeting on *Brendan & the Secret of Kells*, Kilkenny, Ireland.

You start by entering experimental capacities into the system. Once everyone is happy with your plan you will commit the capacities as a new plan.

During the production you may enter new experimental

capacities and test them in a simulation. Once you and your partners agree to the new capacities, you commit to the new schedule.

ESTIMATES

The production [Workflow types](#) are divided into task types.

Every task type will be assigned a unit, which will allow for measurement and simulation. The units can be anything from frames, to working hours, kilobytes or drawings.

As long as the same unit is used for task estimates and for the corresponding capacity, we can plan and simulate in any unit found.

Task estimates are usually calculated automatically based on rules like scene duration, character count or difficulty.

You can also manually type in estimates which will overrule the automatically calculated estimates.

SIMULATION

You can run simulations in HoBSoft. Once the production is broken down into tasks with estimates which are connected with dependencies, you have a detailed computer model of your production.

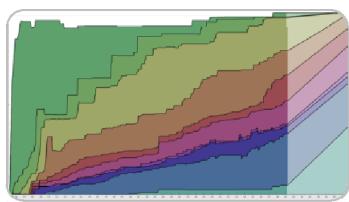
The estimates can be considered the "resources" necessary to solve the tasks and the capacities are the resources available.

The simulation will graph how much work is available to work on for any team at any time. We call this amount for the "Pile".

For tasks that are to be solved by human teams, the system

will produce a warning if the pile gets below a certain selected threshold. This is an indication that the buffer is getting too small and there is a potential bottleneck.

If the pile gets too big, we may have expensive over-capacity in the previous department which should be avoided as well.



The progress of your production is reported in many different ways. Here is a progress graph showing how the production milestones are progressing.

In the case of automatic tasks, the system should preferably run out of work occasionally. For example, if your render queue can finish all jobs every night, you know that it will not be a bottleneck.

COMPARE PLAN WITH TRACKING DATA

HoBSoft automatically reports and graphs the recorded history for the production combined with the simulation output from the committed capacities.

When you gain experience about the various processes, during the production, you should refine the computer model with more precise estimates and capacities and run new simulations.

COMMUNICATE SCHEDULE
Not only does the system provide you, as production manager, with some useful tools and a great overview. It also helps you communicate your decisions to your teams through its web based interface.

EDITING

Implement HoBSoft's well organized editing methodology and benefit from automatically updated editing stations in multiple studios and much more

Changing duration or adding/deleting scenes has always been difficult during production.

Implementing bullet proof procedures for such timeline changes drastically reduces the problems you would otherwise experience.

Frequent distribution of up-to-date movies must also be put in place.

OVERVIEW

We propose to use your editing station as the center for timeline changes in close connection with the HoBSoft database.

Editing decisions are communicated and automatically enforced within the HoBSoft system.



We take your animatic and establish a well ordered Avid or FCP timeline which is automatically updated with the latest work from the collaborating studios during the entire production.

Simultaneously updated, editing suites are often installed in multiple studios. This eliminates time consuming rendering and distribution of movie files.

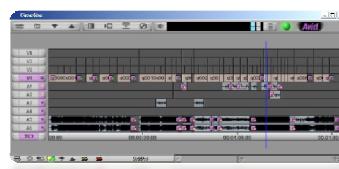
FROM ANIMATIC TO PRODUCTION

The animatic making process is very creative and the resulting editing project is often quite large and "messy".

Together with the editor, we plan how to setup a new timeline which automatically links to the media from HoBSoft's automatic production system.

Based on our many years of experience in onlining/assembling the final masters of animated feature films and live action movies, we will assist in making an editing project which comply with industry standards.

If the project has been story boarded in software other than Avid or Final Cut Pro we will help you convert your project to either of the two.



For this purpose we have developed various tools, including software which can convert Adobe Flash projects to an editing software while keeping links to original sound files.

A HOBSOFT TIMELINE
Regardless the many ways of getting there, we will eventually provide you with an editing timeline which links to automatically updated media.

We recommend that you have four video tracks in your timeline:

- V4 Approved
- V3 Ready
- V2 Layout
- V1 Animatic

The tracks with animatic and layouts are very convenient to have available throughout the entire production.

The track we call "Ready" always has the latest version of the scene. This version may be approved or may be work in process. This track is very useful for the director during his approval process.

The track we call "Approved" always has the latest approved version of the scene. This track is very convenient for management screenings or to show investors etc.

AUDIO TRACKS

We also encourage you to establish a system with audio structured in separate groups of tracks for dialog, fxs and music. Some also have an ambient group of tracks.

Among other things, we use these tracks to automatically provide the artists with these files for each scene:
dialog.wav, fx.wav, music.wav and stereomix.wav.

AUTOMATIC UPDATE

With HoBSoft, all the tracks are updated automatically. Here is an example. Let's say an animator marks a scene "Ready" as key animation in Brazil. The HoBSoft system will then automatically update the media file in the "Ready" track

in all the studios with an editing suite. If the scene is approved the media file in the "Approved" track will be updated.

If you prefer Avid you must periodically perform a "Batch Import" of your media from the studio file server where HoBSoft updates the source files. During the day it has shown sufficient to update only those scenes which you know are ready for approval in the HoBSoft system. Occasionally you may choose to batch import all your shots over a night or weekend.

If you prefer FCP, you update your media files with the latest from the file studio file server by requesting an automatic synchronize by the HoBSoft

system. The update usually takes a minute or two and can be performed through a few clicks on the web interface.

MULTIPLE EDITING SITES

We usually setup several editing sites. On *Brendan & the Secret of Kells*, we had installed four Avids which were all updated automatically. At first, the actual editing took place in Kilkenny, Ireland, but was later continued from Paris while still being approved in Ireland and Angoulême, France. Further we had an automatically updated Avid installed in our office in Switzerland in order to provide the best possible support.

On the production of *Chico & Rita*, we have installed several

FCP setups which are updated automatically.

You have to choose to work with either Avid or FCP on your production.

The automatic updates can be filtered so that studios only have the parts of the movie relevant for them.

TRAINING

Since editing is such an essential part of bringing structure and order to the production, we always include several days of training as part of our package."

Some of this training takes place with the editor in the studio and a lot of time with Skype and remote control of the editing workstation.

MASTERING

Let HoBSoft assemble your film and get daily color managed screenings to gain creative control and improve directing

Your animated feature film needs to be assembled, color graded and mastered for 35 mm print, digital cinema, BluRay and DVD.

Traditionally the assembly is done as part of a very expensive post production process, but with HoBSoft your production will be assembled daily. This will provide significant creative improvements.

Further, HoBSoft will assist in establishing a color managed environment for reviewing the assembled master. Preferably your own color grading suite.

OVERVIEW

HoBSoft automatically assembles your movie on a daily basis during the entire production period.

We help you establish your own screening facilities for reviewing and color grading of the assembled master in a color managed environment.



We suggest that you completely rethink your view on mastering, as a post production process, to cut costs and gain invaluable creative benefit.

CHOICE OF STRATEGY

There are 4 reasons why you want to assemble your film in your own studio.

1. ASSEMBLY

Sooner or later the movie must be assembled. Do it yourself and avoid extremely expensive post production.

To assemble or online a film means to recreate the film in full resolution and color depth in the same way you have it in a low resolution proxy version in your editing workstation.

2. REVIEW

If you allow the director to see the film in full resolution with audio, during the production, his creative performance as a director will increase. If you don't, he will ask for expensive and maybe even impossible changes in post production.

You may even want to screen the film for the whole team occasionally.

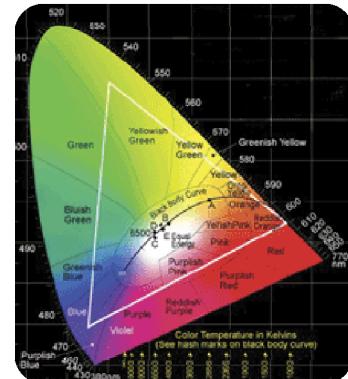
3. COLOR GRADING

Sooner or later the movie must be color graded. Do it yourself and avoid extremely expensive post production.

If color grading is available during the production you will be able to make better decisions on whether a certain problem should be fixed by an expensive retake of an early step or if it will be all right as it is.

4. COLOR MANAGEMENT

Make the effort and establish a color managed screening facility and avoid expensive and frustrating test screenings with endless discussions about whether the colors are the same as in the studio.



BEST SOLUTION IS ALL 4 IN ONE

In order to achieve all the possible benefits, we recommend that you assemble/online your production by using one of the integrated assembly/color grading boxes on the market today.

If you choose to do so, you will get all four needs covered in one box.



HoBSoft has extensive knowhow about onlining with BaseLight from **FilmLight**, flame from **Autodesk** and FrameCycler from **Iridas**.

For animated feature films we currently recommend **BaseLight** from the London based **FilmLight** because they offer the most affordable solution of high end grading systems with color

management, and they are open for HoBSoft to create scripts for it.

The total budget for a grading cinema with a HD projector, screen, audio system, simple BaseLight, furniture, color management starts at €100K

SECOND BEST SOLUTION

If you choose to postpone color grading and color management to expensive post production, we can still implement a cheaper online pipeline for you by onlining with HoBSoft's onliner tool. This tool has onlined numerous feature films.



Cirkeline is one of the many animated feature films that has been onlined with HoBSoft's onliner. This has saved the producers from very expensive post production facilities.

You must provide a computer and a software fast enough to do playback of the 130+ MB/sec. This can be done for less than €20K with Iridas Frame Cycler and a big computer and monitor.

AUTOMATIC ONLINE

In either case we use HoBSoft's reliable file structure to update the media for the mastering computer with the latest full resolution version of a scene.

EXPERIENCE

HoBSoft has 10 years experience as working in high end post production houses.

We have extensive knowhow about flame, inferno, smoke, Avid, FCP, 35 mm print etc. and we have onlined numerous live action feature films.

HoBSoft also delivered the color grading services for the animated feature film "[Asterix and the Vikings](#)".

HARDWARE

Use HoBSoft's production experience in storage, internet connections and IT-infrastructures, to avoid pitfalls

HoBSoft will analyze the production needs based on our extensive experience but also by taking into account the existing storage, bandwidth and other aspects in each of the collaborating studios and present the optimum scenarios to you.

HoBSoft will install one or more HoBSoft servers in each studio to facilitate secure transfers and fast local access to the HoBSoft production system.

OVERVIEW

We will support your IT-manager with our extensive production experience in animated feature films, regarding studio IT-infrastructures.

In particular, we check that the head quarter studio has the necessary storage from the beginning of the production and that the internet bandwidth allocated to the production is enough to avoid bottlenecks.



We install a HoBSoft server in each studio through which all transfers are passing via secure encrypted connections (SSL). The HoBSoft servers also host a local version of the production database and thousands of milestone movies for fast local access.

STORAGE AND MIRRORS

HoBSoft needs a file share on the network in each studio. We call these file shares "Mirrors".



Installing in Spirit in Angoulême, France for the production of "Brendan & the Secret of Kells"

In the head quarter studio we have a second file share called the "head quarter" where HoBSoft guarantees that all files and folders have passed quality control.

The only user who is allowed to log in to the head quarter share is the HoBSoft system.

During the production, we are automatically providing the data for those who need it, when they need it, by automatically checking resources in and out of the head quarter to the various mirrors. The automatic transfers are executed as part of the [Workflows](#) which the system has been given responsibility for as described in [Automation](#).

Depending on your expectations and animation techniques, we will calculate

the necessary server disk space in each studio.

CALCULATION OF INTERNET BANDWIDTHS

We will determine the bandwidth necessary to complete your production on time.

We will collect information about the various connections that are available to the studios and propose to you how to get the most out of them.

Various scenarios can be tested by the simulation engine because internet transfers are part of the production simulation mentioned in [Management](#).

HOBSOFT SERVERS

The servers we provide are all from Dell or IBM including fast on site support of hardware failures (usually 4 hour on site support).



HoBSoft server, fileserver and storage.

In some less critical cases, we have accepted scenarios where the studios provide their own equipment. This is usually done to overcome unpredictable processes in customs.

SECURITY

Let HoBSoft design your security strategy and implement it during our studio visits

HoBSoft will design a security strategy that the various collaborating studios must comply to.

HoBSoft's minimum security strategy ensures that all communication goes via secure connections.

Implementing your security strategy is part of HoBSoft's services during their studio visits.

OVERVIEW

The obvious risk of collaborating on the internet is that your movie will be available on the internet even before the cinema release.

We take several measures to minimize this risk

- 1.) All communication in the HoBSoft system is encrypted on secure connections(SSL).
- 2.) All server identification is verified by server certificates.
- 3.) No studio has the entire movie available at any time.

We will make sure that you have a strategy for secure storage and transferring of your production data.



It must be emphasized that FTP is highly insecure and

should not be part of a modern security strategy.

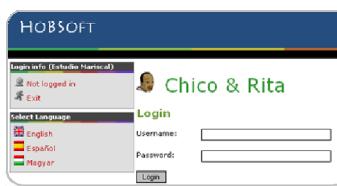
ONSITE

IMPLEMENTATION

While visiting the studios to implement the working procedures of your production we are also integrating a HoBSoft server for safe deliveries and access to the production system according to the productions security strategy.

The integration of the HoBSoft server is always made in close collaboration with the local system administrator.

In many cases we have brought studios up to minimum security standards by setting up firewalls and password procedures even though the studios, from a contractually point of view, is supposed to have basic security in place by themselves.



TRACKING SYSTEM

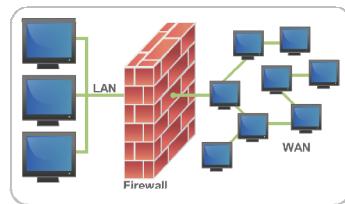
The HoBSoft tracking system is accessed with web browsers via **HTTPS** web servers with the **SSL/TLS** protocol to provide encryption and secure identification of the server. HTTPS connections are often used for payment transactions on the internet and for sensitive transactions in corporate information systems.

PRODUCTION DATABASE

All communication between the replicated database and the master is encrypted.

FIREWALLS AND DMZ

We only need to route one SSH connection to the HoBSoft server in each studio. The port can be any port of your choice but is usually TCP 22.



Every physical HoBSoft server has a number of software servers running as Linux daemons. Some of the servers can be moved to another computer in a DMZ (De Militarized Zone) of your network for increased security if your system administrator enforces this level of security.

MEDIA MANAGEMENT

We can use HoBSoft's reliable file structure to manage the media available to each studio, thereby limiting sequences available to subcontracted studios and their editing systems.

This will avoid that any subcontractor will ever have a complete movie available in their editing system.

In some cases we have burned studio names in the distributed media to prevent any temptation.

BACKUP

Use HoBSoft's well ordered and reliable file structure to improve your backup routines

HoBSoft's methodology and quality control ensures that you have a well organized file structure in which it is well known where your various files are.

HoBSoft uses the reliable file structure to help the system administrator of the main studio to optimize the backup routines.

OVERVIEW

A file structure for an animated feature film often consists of several millions of files in about one hundred thousand folders taking up several Terabytes of data on your file server.



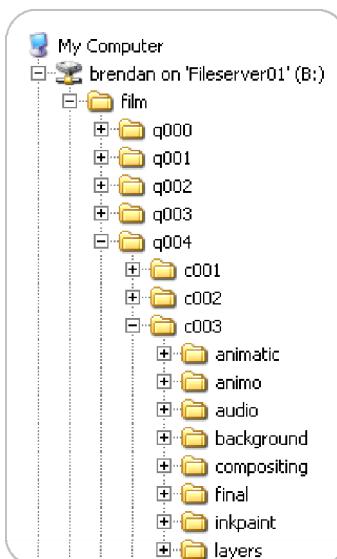
*Backup, backup, backup.
Computer remains after a fire.
It is a telephone on the top.*

It is a core functionality of HoBSoft to ensure that you have a well organized file structure.



Harddisk platter and actuator arm.

We use HoBSoft's reliable file structure to differentiate the importance of your various data and back them up at different frequencies.



Example of a well organized a HoBSoft file structure.

It is for example very important to back up your compositing setups but less important to backup the rendered output since it is relatively easy to recreate.

This means that we can back up a few Gigabytes of setups frequently (for example daily) but back up several Terabytes of rendered output less frequent (for example weekly).



With today's internet connections it is becoming more and more realistic to outsource backup to online services that are specialized in safe storage. On the picture is a tape robot from a very large facility.

RESTORING DATA FROM HOBSOFT MIRRORS

Our mirror technologies may never be used as a substitution for real backups. However – in real life - most data are restored by reloading the resources from the HoBSoft head quarter, or one of the other mirrors, to the local mirror because it is incredibly easy to do with just a few clicks in the production system for those who have the necessary privileges.

WORKFLOWS

Let HoBSoft map and document your workflows and make them automatic

HoBSoft maps the production workflows together with the production manager and supervisors of the various departments.

Once the workflows are talked through they are modeled as templates within the HoBSoft system.

OVERVIEW

One of the most urgent subjects for HoBSoft to address at the early stage of any job is to map the production workflows.

We will arrange meetings and workshops in the studios where your production management resides.



Early planning on the animated feature film Chico & Rita.

Often the workflows are all planned from the head quarter studio but sometimes a certain job, like backgrounds or ink & paint, are completely delegated to another studio. In that case the related workflows naturally are planned in

collaboration with those studios.

Besides the meetings and workshops, we will be discussing the workflows with key people like the editor, lead 3D, lead animator, compositor, director, production manager etc.

R & D

HoBSoft gives advice regarding workflows, production methods, software and approval procedures etc. based on HoBSoft's many years of experience in producing animated feature films.



However - every new project seems to include never-before-seen methods. Particularly if such methods to some degree can be automated, HoBSoft will investigate pros and cons and give inputs to the producer.

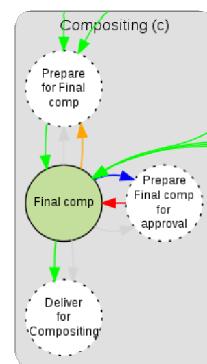
If necessary, we will plan and supervise the execution of technical tests, together with your team. Results and conclusions from such tests are usually published in reports with analysis of cost, quality, production speed etc. The report is used by the production management to make the optimum choices.

WORKFLOW MAPPING

When we map your production workflows within the HoBSoft

system, we are making it easy for you to break down your movie into workflows like "Compositing", "Ink & Paint" or "3D Background".

The workflows are entered into the system as templates called "Workflow Types".



The Workflow Types, which we define in HoBSoft, are presented as workflow diagrams which are automatically drawn by the system.

During the production, these workflows are applied to sequences, scenes, backgrounds, characters, props, vfxs and more.

A feature film will typically consist of 10,000 workflows with 100,000 tasks which are connected with 150,000 dependencies.

TASKS

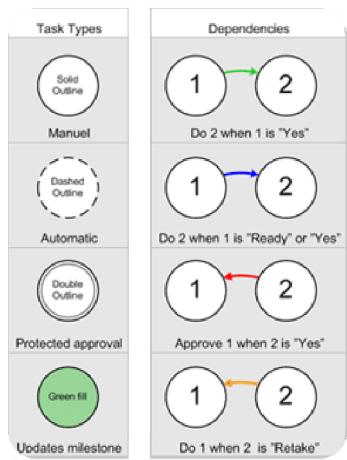
Every workflow consists of a number of tasks

Some tasks, like "Final Comp", "Key Animation" or "Scan Clean Up", are manual tasks that must be done by human beings

Some tasks, like "Prepare for Final Comp" or "Deliver for Compositing" are automatic tasks that will be automatically taken care of by the HoBSoft system. Click here for more details on HoBSoft and [Automation](#).

DEPENDENCIES

Various task types are connected with dependencies.



HoBSoft uses 4 different kind of dependencies to describe the workflows

Dependencies prevent tasks from showing up on an artist's To-Do-List before he can actually start working on them.

Dependencies are also crucial for the HoBSoft system to

determine which automatic tasks are ready to be executed.

The production proven methodology behind the HoBSoft workflows, with their tasks and dependencies, is one of the main reasons why HoBSoft can be up and running on a feature film project in just a few months.

BREAK DOWN

The system needs to know many things about your production. To enter all this information into the database is commonly referred to as making the break down.

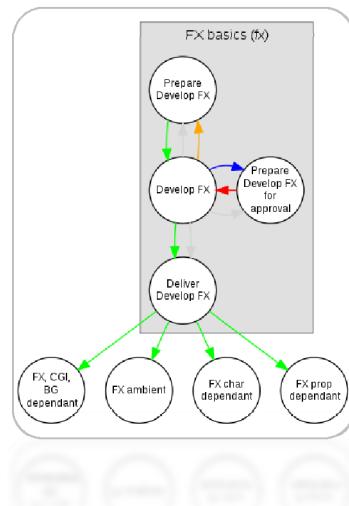
HoBSoft is doing a lot of the breakdown automatically based on the animatic in your editing system.

If you already have lists with breakdowns, for example of character participation in scenes, we will happily help you by importing these with a database script or similar method.

During the production breakdown you will be using the workflow templates to assign workflows to the production scenes.

The system has standard workflows and optional workflows. You may for example have a standard "Compositing" workflow which

is automatically assigned every scene and an optional "2D Animation" workflow which are only assigned to those scenes that actually contains 2D Animation.



FX basics workflow. For tasks are waiting for the workflow to complete.

You can also assign workflows to sequences, characters, props, backgrounds and locations.

The workflows consist of any number of tasks which are connected by dependencies.

AUTOMATION

Save many years of salary by using HoBSoft's integrated automation

HoBSoft includes an automatic production system which is customized for every production.

Tasks that are usually automated include rendering, quality control, transferring, distribution of data, image converting and updating movie files.

OVERVIEW

When we design the **Workflows** for your production, we will seek to automate as much as possible.

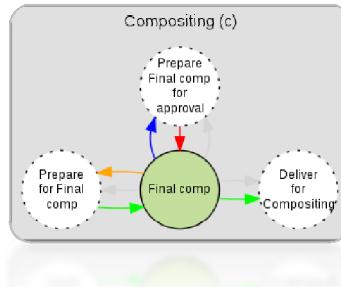
We have created a concept for fast development of automatic procedures by including them in the same production systems workflows.

The automatic tasks are triggered to begin when manual tasks are approved or retaken.

The automatic work is executed by automatic HoBSoft workers which are mostly running on the HoBSoft servers in the collaborating studios.

STANDARD WORKFLOW

The compositing workflow shown below is a good example of the most common form of automation in HoBSoft, where one manual task is surrounded by three automatic tasks.



Standard workflow for compositing.

The compositor is responsible for the task called "Final comp". It is a manual task so it is drawn with a solid outline.

The system has marked the "Final comp" task green because it has been instructed to update a milestone movie file every time it is marked ready.

Before the "Final comp" there is a task called "Prepare for Final comp". The task is automatic and shown with a dotted outline.

"Prepare for Final comp" is updating the mirror in the compositing studio with the latest version of layers, audio and compositing setups.

Because of the green arrow the task "Final comp" will not be available to the compositor before the resources are fully updated on his local mirror.

When the compositor has reached a point where he would like to show the current compositing to the supervisor or director he marks it ready within the HoBSoft system.



Animator in LightStar Studios, Brazil undertaking a very manual task.

The system will automatically start to execute the task "Prepare Final comp for approval" task.

Prepare Final comp for approval will typically create a copy of the setup in the far away studio. If the copy pass quality control it will be synchronized with head quarter where it will be automatically rendered in order to update the compositing milestone web movie, the editing systems and the assembled master.

The rendered movies will then be presented for the director.



The movie "Directors Approval" shows how easy the director can approve or retake the work done by the crew.

RECIPES

Automatic tasks are executed by submission of a recipe to the job queue.

Recipes are made of processes.

PROCESSES

Example of a recipe for updating a milestone:

1. Make local copy
2. Check file naming
3. Check resolution
4. To Transfer Cache
5. To Destination
6. Write Destination
7. Make local copy
8. Check file naming
9. Check audio format
10. To Transfer Cache
11. To Destination
12. Build Video
13. Live Action -> Live Action
14. Build FCP Media
15. Live Action -> Animatic
16. Build FCP Media
17. Live Action -> Ready
18. Build FCP Media
19. Live Action -> Approved
20. Build FCP Media

Processes are divided into units for parallel processing.

UNITS

Every unit has a log which is very useful for troubleshooting.

For example if an artist has delivered a number of files which does not match the duration in the database he will have a process in error and can find out why by reading the log.

Units are worked upon by workers.

HOBSOFT WORKERS

We have developed a system where a network of HoBSoft workers are undertaking the automatic tasks in a way very similar to a render farm.

A worker is software running on a computer which periodically ask the HoBSoft system for work to do.

We have transfer workers for secure transfers, file check workers for quality control, build video workers for updating movie files etc.

	Name	Status
1	q058c002 Pre	
2	q049c024 Upc	
3	q049c023 Upc	
4	q049c022 Upc	
5	q049c021 Upc	
6	q049c020 Upc	
7	q049c019 Upc	
8	q049c018 Upc	
9	q049c017 Upc	
10	q049c016 Upc	
11	q049c015 Upc	
12	q049c014 Upc	
13	q049c013 Upc	
14	q049c012 Upc	
15	q049c011 Upc	
16	q049c010 Upc	
17	q049c009 Upc	
18	q049c008 Upc	

It is part of HoBSoft's service to make sure that the necessary workers are running in all the studios.

CUSTOM WORKERS

Every production will need its own custom workers. If your team has developed scripts or similar we can most likely execute them automatically by submitting the scripts from HoBSoft.

Our library of automatic scripts are constantly increasing.

One example is an automatic process which removes noise in white areas of scanned drawings, without hurting the lines. This way we are able to reduce filesizes to 20% before transferring on the internet.

Another example is a whole set of routines to import, export and render setups from ToonBoom Harmony.



The list of recipes in HoBSoft is good place to find an overview of what the servers are doing in the various studios.

TRACKING

Let HoBSoft collect accurate tracking data automatically. Keep track of characters, props etc.

HoBSoft implements a tracking system which is integrated with the automatic processes and the artist's deliveries.

The fact that the tracking system is integrated makes it possible to automatically collect 100% accurate tracking data and always be 100% up to date.

OVERVIEW

While many films have been produced by tracking the state and responsibilities of typically 1500 scenes and more than 50000 tasks in gigantic Excel spreadsheets, a modern producer is expected to provide a tracking system which can be simultaneously accessed by many users.

We install a tracking system for your animation production which can be accessed by an unlimited number of users via a secure web interface.

The primary advantage of a HoBSoft tracking system over other tracking systems is that the tracking data are collected automatically and therefore by definition always correct.



The movie "Directors Approval" shows how easy the director can approve or retake the work done by the crew.

PROBLEMS WITH OLD SCHOOL SETUPS

A database will always be limited to describe reality according to the data we enter in to it. It is practically impossible to achieve a completely accurate picture of the status in a classic workflow where the tracking system is separated from the artists FTP'ing, emailing, chat and phone calls.

Even 90% accuracy may seem overambitious when you try to track reality in a standalone tracking system.

The classic procedure is to upload a movie file to an FTP server followed by an email. The assistant to the director will then download the movie and read the email.

Unfortunately none of all this activity is recorded in a standalone tracking system, not to mention all the notes in the e-mail which are not tracked either.

The production management will ask the various departments for status reports but they will not have it automatically. A tracking system in such a setup will never be 100% accurate.

We have seen examples where the line producer and an assistant were spending every Friday contacting every studio on the production to ask for updated status reports in order to generate an updated overview.

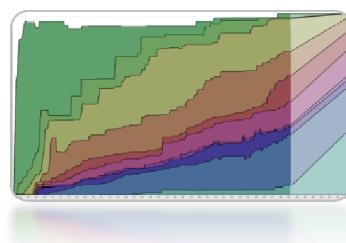
Not only did it cost the producer two full time salaries a week (150 working days) but he was also limited by having only one weekly report which

were already old news by the time he got it.

INTEGRATED TRACKING

HoBSoft's "trick" is that movies and other files are transferred by the tracking system itself because it is integrated with the automatic production system.

Therefore the HoBSoft system never has problems keeping up with reality, simply because the system itself is the reality.



Progress status reports are available as live online reports showing the progressed production together with simulated future.

BREAKDOWN OF ASSETS

A typical animated feature film may have 80 sequences, 1,500 scenes and 5,000 storyboard panels.

In order to get flying as fast as possible, we assist you in the initial creation of assets such as characters, props, efx's, background and locations in the database. You will have to provide us with lists in any suitable digital format and we will use a combination of scripts and spreadsheet magic to feed the database with your assets.

During the production you can add further assets to the database via the web interface.

All assets can have a large picture and a model sheet as a pdf file linked to it.



On the feature film production of "Brendan & the Secret of Kells", we had organized all the model sheets as large pdf files in the HoBSoft system.

BREAKDOWN OF ANIMATIC

HoBSoft has developed a special technique where we use your editing system to break down an animatic into sequences, scenes and storyboard panels.

HoBSoft's techniques work equally well with each of the two market leading editing systems Avid and Final Cut Pro.

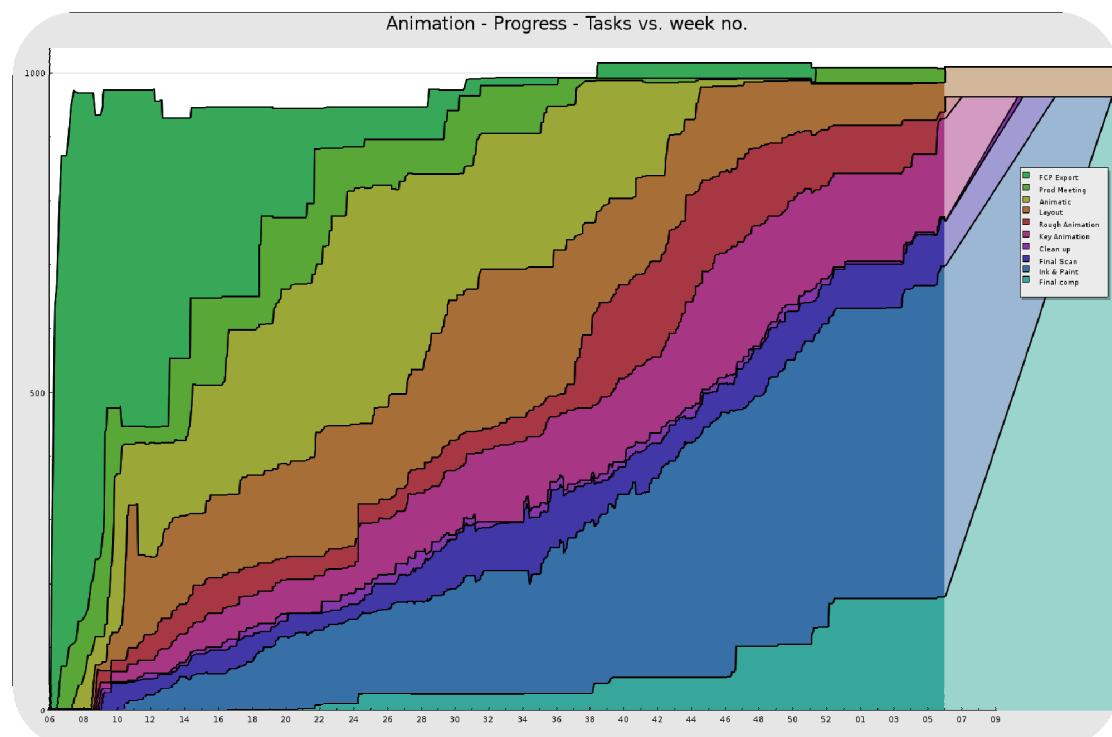
We have developed software which can create sequences, scenes, storyboard panels, audio files, movie files, lipsync

etc. in the database by the use of the output from your editing system.



Automatically updated HoBSoft timeline in Avid.

During the production you can add further scenes and sequences to the database via the web interface.



One of the many reports shows the number of approved tasks over time. To the left is shown historic data and to the right projected future.

CONTACT

Integrated production system for animated feature films

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